

REMARKS

This application has been carefully reviewed in light of the Office Action dated November 8, 2004. Claims 1 to 25 are in the application, of which Claims 1, 10, 17, 19, 20, 22, 23 and 25 are independent. Reconsideration and further examination are respectfully requested.

Turning first to formal matters, the Office Action indicated that a certified copy of the Japanese priority application had not been received. Actually, a certified copy of the Japanese priority application was filed on June 18, 2001, as shown in the attached copy of a Claim To Priority and PTO-stamped postcard that confirms receipt by the PTO on that date. It is respectfully requested for the Examiner to review the file for this application carefully, and to confirm that it contains a certified copy of the Japanese priority application. If the PTO has misplaced the certified copy, then the Examiner is respectfully requested to contact the undersigned so as to work out an appropriate procedure for locating it.

The specification has been amended merely to address typographical errors noted in a review thereof. No new matter has been added.

Turning to the merits of the Office Action, all claims were rejected under 35 U.S.C. § 112, second paragraph, for alleged indefiniteness. In response, the claims herein have been amended so as to clarify the nature of the claimed threshold matrix: the threshold matrix is claimed in terms of the dot pattern that it produces in an output image. For example, the claims as amended specify that for each gray level of all gray levels, the threshold matrix is created such that the dot pattern of the output image is mutually the

same in each block of a first group of blocks, whereas for each gray level of all gray levels the dot pattern of the output image is mutually different for at least some blocks of a second group of blocks. The dependent claims have been amended for consistency with the changes made to the independent claims. In view of these changes, withdrawal of the § 112 rejection is respectfully requested.

Claims 1 to 16 were rejected under 35 U.S.C. § 112, first paragraph, for alleged failure to comply with the enablement requirement. According to the rejection, there is no support for the claim limitation which states that the dot patterns in the plural blocks are made mutually the same in all gray levels. Applicants respectfully disagree, and note that there is ample support for such a description. For example, each of the dark-cross hatched blocks in figures like Figures 3 and 12 result in dot patterns that are mutually the same for all gray levels, as explained in more detail with reference to figures like Figures 5 and 13, respectively. Withdrawal of this basis for rejection is therefore respectfully requested.

Claims 2, 5 and 12 were further rejected based on their recitation of a “repulsion potential”. “Repulsion potential” is clearly described in the specification, and one example of a suitable repulsion potential is illustrated in Figure 6 of the subject application. In answer to the inquiry raised at page 4 of the Office Action, “repulsion potential” does not refer to error diffusion, which is a halftoning technique that is unrelated to the dispersed-dot dither technique of the present invention. Withdrawal of the rejection of Claims 2, 5 and 12 is respectfully requested.

Claims 1 to 25 were rejected under 35 U.S.C. § 103(a) over U.S. Patent 6,633,412 (Lin). The rejection is respectfully traversed.

It is true that the present invention and the disclosure of Lin are both related to a common objective: to improve uniformity of dot patterns and thus to improve texture. However, Lin achieves this result using a threshold matrix that differs fundamentally from that of the present invention. Lin uses a cluster-dot-dithering technique and modifies a halftone cell thereof using a function of the spatial position of the sub-area of a source image (see, column 6, line 60 *et seq.* in conjunction with Figure 9).

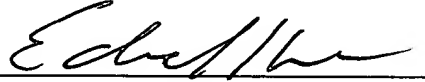
The invention, on the other hand, is directed to the design of a threshold matrix that results in improved texture and uniformity even when the threshold matrix is tiled two-dimensionally and periodically, in a longitudinal or lateral direction (see, for example, Claim 7). Such a result is achieved for the reason that, for each gray level of all gray levels, the dot pattern of an output image is mutually the same in each block of a first group of blocks but is mutually different for at least some blocks of a second group of blocks.

It is therefore respectfully submitted that the claims herein define subject matter that would not have been obvious from the applied patent to Lin, and withdrawal of the § 103(a) rejection is respectfully requested.

No other matters having been raise, the entire application is believed to be in condition for allowance and such action is respectfully requested at the Examiner's earliest convenience.

Applicants' undersigned attorney may be reached in our Costa Mesa,
California office at (714) 540-8700. All correspondence should continue to be directed to
our below-listed address.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Ed Kmett", written over a horizontal line.

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